Abstract of the Disclosure

Peptide inhibitors of dipeptidyl-aminopeptidase type IV (DP-IV) are provided. The peptide inhibitors have an isomeric purity of about 96-99 percent. The peptide inhibitors include one or more amino acids covalently coupled to boroproline moiety. The compounds are useful as DP-IV inhibitors, *in vivo* and *in vitro*.